Breast Self Examination

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Abstract

A pre-experimental design with pre-test and post-test without control group was undertaken at urban area in Latur. 40 adolescent girls selected through Nonprobability convenient sampling technique to assess the effectiveness of structured teaching program regarding knowledge and attitude on Breast self-examination among the adolescent girls. The overall mean knowledge score of adolescent, girls during pre- test was 6.24±3.58 (SD) which is 31.36% of the total mean score, whereas during post–test, it was 5.8±1.09 (SD) which is 87.30% of the total mean score. Depicting difference of 55.93% increase in mean percentage of score. It reveals that the structured teaching program was effective among adolescents' girls. Reveals that adolescent girls had gained adequate knowledge. It is observed that during pre-test the adolescent girls had poor overall knowledge whereas it was good after the implementation of structured teaching program. Highly significant difference was found between pre-test and post-test knowledge score. The study shows breast self-examination and its health effects was effective to improve the knowledge & attitude of adolescent girls at urban areas, Latur.

Keywords: Effectiveness; Structured teaching program; Breast self-examination; Breast cancer; Adolescent girls.

Introduction:

Certain factors may be protective in relation to the development of thebreast cancer. Regular exercise has been shown to decrease the risk because it can delay menarche, suppress ministration and like pregnancy reduce the no of ovulatory menstrual cycle. Also it reduces body fat where estrogen is stored and can decrease extended exposure to estrogen [1].

Our relationship with the world starts from mother's breast milk. Breasts are very important organ for each women as this are the symbols of motherhood and womanhood. So any disease affecting breasts cancer is important. Current statistic indicate that a women's life time risk for developing breast cancer is one in eight, but this is not the same for all age group. For example, the risk for developing breast cancer by 35 year is 1 in 622, by 60 is 1 in 23. Approximately 80% breast cancer diagnosed after the age of 50 year in India out of 1 lakh people, 100 are affected by cancer and out of this 30 are affected by breast cancer. In India women are more affected by cancer than men (men 42 & women 52). The important reason for the breast cancer is increasingly seen in women. Although there are no specific cause of breast cancer, researcher have identified cluster of risk factor, Genetic mutation, increasing age, personal or family history breast cancer, early menarche, null parity and later maternal age at first birth, late menopause, history of benign proliferative breast disease, exposure to ionizing radiation, obesity, Harmon replacement therapy and alcohol in take [4].

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Need for Study

Cancer has become one of the ten leading causes of death in India. It is estimated that there re early 2 to 2.5 million cancer cases at any given point of time in India. Over 7 to 9 lakh new cases and 3 lakh deaths occur annually in India due to cancer, whereas in Karnataka there are about 1.5 lakh prevalent cases of cancer and about 35,000 new cases are added to this every year. Based on the consolidated report of cancer registries the overall common cancer sites in South India are stomach for males and cervix for females [2].

Breast cancer is the most common diagnosed malignancy in women worldwide (22%) and in India (18.5%) it ranks second to cervical cancer. The burden of breast cancer is increasing in both developed and developing countries; the peak occurrence of breast cancer in developed countries is above the age of 50 whereas in India it is above the age of 40. In India the age standardized incidence rate of breast cancer varies between 9 to 32 per 1,00,000 women. To generate the reliable data on magnitude and pattern of cancer, India started National cancer registry program in 1981. Up to 2003 the program comprised of six population based cancer registry and one registry serving rural area covering the total population of 35.7 million (only 3.5% of the Indian total population) and an increasing trend in incidence is reported from various registries of national cancer registry project and now India is a country with largest estimated number of breast cancer deaths worldwide [3].

Review of Literature

A case control study was conducted by Ali Abu – Salem Ot Abdulla Hassan M (2007) to identify and investigate the knowledge and practice of breast self-examination with the influencing factors. A total of 80 female nurses from Prince Rasheed Military Hospital were selected for the study. The data was collected by questionnaire and analyzed by using descriptive statistics. The study results indicated 52% of the sample performs breast self-examination. The study concluded positive correlation was found between nursing work experience and their practice in breast self-examinations [5].

Fatma demirkiran (2007) conducted study to know how the nurses and teachers perform BSE; are they reliable sources of information? 289 women working in Aydin, Turkey (125 nurses and 164 teachers) were included in the study. They found that the knowledge of nurses about Breast Self-Examination was higher than that of teachers (81.5%; p<0.001). They concluded that nurses and teachers should be supported with information enabling them to accomplish their roles in community. To improve Breast Self-Examination practice, it is crucial to co-ordinate continuous and planned education [6].

Madana H. et al. (2009) assessed the Breast cancer risk factor and screening awareness among women nurses and teachers in Amman, Jordan. This study used data from 163 nurses and 178 teachers surveyed in Amman to determine 2 dimension of breast cancer awareness score for nurses was 88.3%, compared with 73.1% for teachers (p<. 0001). Study concluded that screening education program is very important for prevention of Breast cancer [7].

A cross sectional study was conducted on attitudes and knowledge of breast self-examination among Austrian women's in Australia. 975 healthy women in an Austria-wide population were asked about their knowledge of breast self-examination (BS) and mammography, and their cancer histories. 92% of the women knew BSE but only 31% practiced it thoroughly. Women living in rural communities with a life companion and younger women were more likely to practice BSE. Women who had family histories of cancer, especially older women, performed BSE significantly more often. There was a trend towards increasing BSE with increasing personal perception of the risk of cancer, especially among older women. The study showed a positive association between BSE and screening mammography. Although knowledge of BSE is widespread, it is actually practiced by only one third of women. Older women but not young women carry out BSE significantly more often when they have family histories of cancer. Information campaigns should target specific groups and emphasize the effectiveness of properly done BSE [8].

Problem Statement

"A study to assess the effectiveness of structured teaching program regarding knowledge and attitude on breast self-examination among adolescent girls at urban areas of Latur."

Objectives

1. To assess the existing knowledge regarding breast self-examination among adolescents girls present in urban areas at Latur.

2. To assess the pre-test knowledge & attitude regarding breast self-examination among adolescents girls in urban area at Latur.

3. To assess the post-test knowledge and attitude regarding breast self-examination amongadolescents girls in urban area at Latur.

4. To assess the effectiveness of structured teaching program.

Operational Definitions

Assess: In this study assess refers to estimate or judge the adult knowledge and attitude regarding breast self-examination.

Effectiveness: It is the significant improvement in knowledge among adolescent girls

Structured teaching program: refers to systematically planned teaching programme designed to provide information regarding breast self-examination

Knowledge: In this study knowledge refers to the correct meaningful verbal response of adolescents girls on breast self-examination.

Attitude: It refers to settled way of thinking or feeling, typically reflected in adolescent girls behavior.

Breast self-examination: a breast self-exam is the regular examination of ones breast to detect lung or other changes that may need to further evaluate as part of screening for breast cancer.

Breast cancer: Breast cancer is an uncontrolled growth of breast cells, the signs of breast cancer includes lump in the breast, a change in the breast shape, dimpling of the skin, abnormal discharge from the nipple or red scaly patch of skin.

Adolescent girls: In these study adolescent girls refer to the females between the age group of 13-19 years.

Hypothesis

H_1: There will be significant association in knowledge & attitude regarding breast self-examination

H_2: There will be significant difference in knowledge & attitude regarding breast self-examination at the end of STP.

Materials and Methods

Research Approach

Research approach used for this study is Quantitative-Evaluative approach.

Research Design

The research design adopted for this study is pre-experimental one group pretest and posttest research design without control group.

$$O_1 \qquad X \qquad O_2$$
$$O_2 \qquad - \qquad O_1 \qquad = E$$

The symbols used-

O_1: Pretest knowledge score of breast self-examination girls regarding knowledge on breast self-examination.

X: Structured teaching programm regarding knowledge on breast self-examination among adolescent girls.

O_2: Posttest knowledge score of adolescent girlsregarding knowledge on breast self-examination.
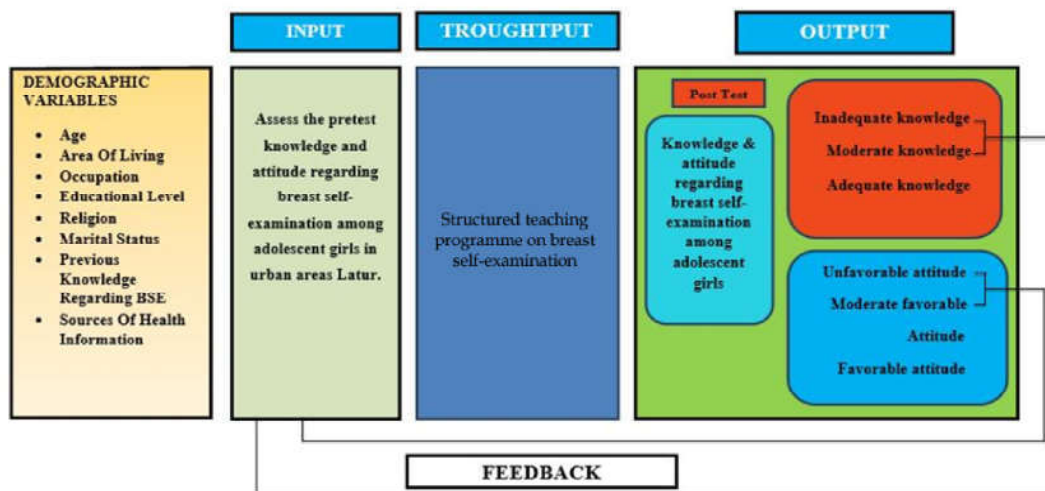

Fig. 1: Conceptual Framework based on General System Theory

E: Effectiveness of structured teaching program regarding knowledge on breast self-examination among adolescent girls.

Setting of study

The study was carried out in urban area, Latur.

Variables

Independent Variable: Structured Teaching Program on BSE

Dependent variable: In this study level of knowledge and attitude regarding BSE is dependent variable.

Demographic variable: Such as age, area of living, occupation, religion, education, marital status, previous knowledge, source of information.

Population: Adolescent girls in urban area, Latur.

Sample & Sampling Technique

Sampling: Adolescents of age 13 to 19 years living in urban area, Latur.

Sample size: 40 adolescent girls living in urban area, Latur.

Sampling Technique: Nonprobability convenient sampling technique

Results

Section 1: Description of the demographic data of adolescent girls.

Section 2: Assessment of knowledge and attitude on breast self-examination among adolescent girls before the implementation of structured teaching program.

Section 3: Assessment of knowledge and attitude breast self-examination among adolescent girls after the implementation of structured teaching program.

Section 4: Effectiveness of structured teaching program regarding knowledge and attitude breast self-examination among adolescent girls.

Sestion 5: Testing the hypothesis.

Table 1: Description of samples according to Demographic variables by frequency and percentage

Sr. No	Demographic Variables	Frequency	Percentage
1.	*Age*		
	13-15 yrs.	2	5%
	16-17 yrs.	12	30%
	18-19 yrs.	26	65%
	20-21 yrs.	0	0%
2.	*Area of living*		
	Rural	15	37.5%
	Urban	25	62.5%
3.	*Occupation.*		
	Student	40	100%
	Job	00	0%
	Housewife	00	0%
	Labor	00	0%
4.	*Educational Level*		
	Primary	0	0 %
	Secondary	14	35%
	Higher Secondary	11	27.5%
	Degree	15	37.5%
5.	*Religion*		
	Hindu	39	97.5%
	Muslim	1	2.5%
	Christian	0	0%
	Other	0	0%
6.	*Marital Status*		
	Married	0	0%
	Unmarried	40	100%
7	*Previous Knowledge regarding BSE*	10	25%
	Yes	30	75%
	No		
8	*Sources of Health Information*		
	Newspaper	5	12.5%
	Television	15	37.5%
	Books	20	50%
	Radio	0	0%
	Total	40	100%

Table 2: Pretest Knowledge Score

Sr. No	Level of Knowledge	Pre Test Scores	
		Number	Percentage
1	Adequate (above 16)	0	0%
2	Moderate (8-16)	4	10%
3	Inadequate (below 8)	36	90%

Table 3: Posttest Knowledge Score

Sr. No	Level of Knowledge	Post Test Scores	
		Number	Percentage
1	Adequate (above 16)	36	90
2	Moderate (8-16)	3	7.5
3	Inadequate (below 8)	1	2.5

Table 4: Pretest Attitude Score

Attitude score	Frequency	Percentage
Unfavorable attitude (<50%)	35	87.5%
Moderate favorable attitude (51-75%)	4	10%
Favorable attitude (>75%)	1	2.5%

Table 5: Posttest Attitude Score

Attitude score	Frequency	Percentage
Unfavorable attitude (<50%)	0	0%
Moderate favorable attitude (51-75%)	4	10%
Favorable attitude (>75%)	36	90%

Table 6: Area wise comparison of mean, SD, and mean percentage of pre-test and post- test knowledge scores about breast self-examination among adolescent girls

Area	Max score	Pre test scores			Post test score			Difference in mean (%)
		Mean	SD	Mean %	Mean	SD	Mean %	
Knowledge on general information on breast self-examination	7	2.3	1.38	32.85	6.4	1.12	91.42	58.57
Knowledge on risk factor and etiology of breast cancer	6	2.02	1.09	33.75	5	1.19	83.33	49.58
Knowledge on steps to perform breast self-examination	7	1.92	1.11	27.5	6.1	0.95	87.14	59.64
Overall	20	6.24	3.58	31.36	5.8	1.09	87.30	55.93

Table 7: Comparison of pre-test and post-test score of knowledge

Sr. No	Level of knowledge	Pre test scores		Post test scores	
		Number	Percentage	Number	Percentage
1	Adequate (>76%)	0	0%	36	90%
2	Moderate (51-75%)	4	10%	3	7.5%
3	Inadequate (<50%)	36	90%	1	2.5%
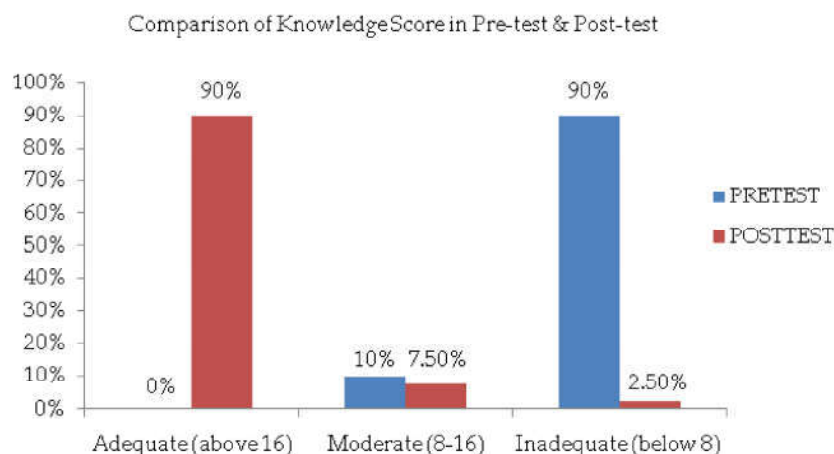
Fig. 1: Showing the average knowledge score in pre-test and post-test

Table 8: Comparison of pre-test and post-test score of attitude

Sr. No	Level of Knowledge	Pre Test Scores		Post Test Scores	
		Number	Percentage	Number	Percentage
1	Unfavorable attitude (<50%)	36	90%	1	2.5%
2	Moderate Favorable (51%-75%)	4	10%	4	10%
3	Favorable (>75%)	0	0%	35	87.5%

Fig. 2: Showing the average attitude score in pre-test and post-test

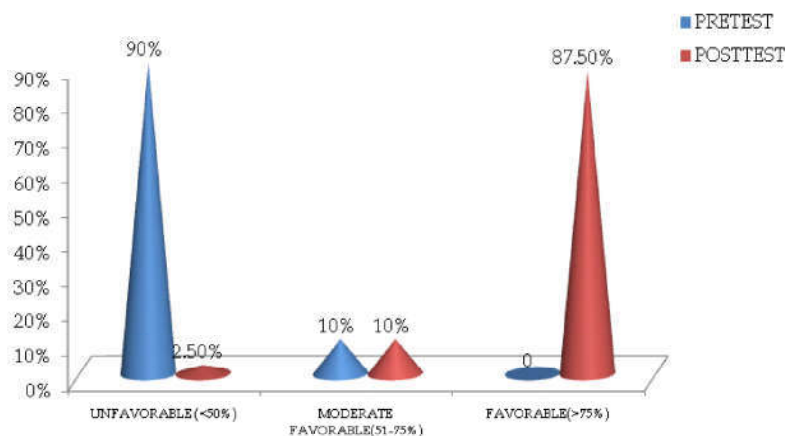**Table 9:** Showing Effectiveness of STP – Knowledge

Group	N	Structurred Questionarie	Mean	SD	DF	"T" Value
STP– Knowledge on BSE	40	Pretest	6.24	3.58	39	3.79
		Posttest	5.8	1.09		

Table 10: Showing Effectiveness of STP – Attitude

Group	N	Structurred Questionarie	Mean	SD	Df	"T" Value
STP – Attitude on BSE	40	Pretest	13.55	2.75	39	86.36
		Posttest	24.95	2.56		

Table 11: Showing Analysis of data to find association between knowledge and selected demographic variables in Pre-test Knowledge on BSE in urban area.

Sr. No	Demographic variable	Inadequate	Moderate	Adequate	Total	p. Value
1.	*Age*					Significant
	a. 13-15	0	0	0	0	
	b. 16-17	2	1	1	4	
	c. 18-19	33	2	1	36	
	d. 20-21	00	0	0	0	
	Total	35	3	2	40	p=0.01
2.	*Area of Living*					Not significant
	a. Rural	17	1	0	18	
	b. Urban	19	3	0	22	
	Total	36	4	0	40	p=O.1
3.	*Occupation*					significant
	a. Student	36	4	0	40	
	b. Job	0	0	0	0	
	c. Housewife	0	0	0	0	
	d. Labor	0	0	0	0	
	Total	36	4	0	40	p=0.25
4.	*Educational Level*					Significant
	a. Primary	0	0	0	0	
	b. Secondary	2	0	0	2	
	c. Higher Secondary	17	1	0	18	
	d. Degree	18	1	1	20	
	Total	37	2	1	40	p=0.05
5.	*Religion*					Significant
	a. Hindu	39	0	0	39	
	b. Muslim	1	0	0	1	
	c. Christian	0	0	0	0	
	d. Other	0	0	0	0	
	Total	40	0	0	40	P=0.1
6.	*Marital Status*					Not Significant
	a. Married	0	0	0	0	
	b. Unmarried	40	0	0	40	
	Total	40	0	0	40	p=0.4
7.	*Previous knownledge*					Not Significant
	a. Yes	10	0	0	10	
	b. No	30	0	0	30	
	Total	40	0	0	40	p=0.4
8.	*Sources of Health Information*					Not Significant
	a. Newspaper	5	1	0	6	
	b. Television	11	1	0	12	
	c. Books	20	2	0	22	
	d. Redio	0	0	0	0	
	Total	36	4	0	40	p=0.25

Table 12: Showing: An Analysis of data to find association between knowledge and selected demographic variables in Post-test Knowledge on BSE in urban area.

Sr. No	Demographic variable	Inadequate	Moderate	Adequate	Total	p. value
1.	*Age*					Significant
	a. 13-15	0	0	0	0	
	b. 16-17	0	0	2	2	
	c. 18-19	0	2	36	38	
	d. 20-21	0	0	0	0	
	Total	0	2	38	40	p=0.01
2.	*Area of Living*					Significant
	a. Rural	0	1	16	17	
	b. Urban	0	1	22	23	
	Total	0	2	38	40	p=0.01
3.	*Occupation*					Significant
	a. Student	0	2	38	40	
	b. Job	0	0	0	0	
	c. Housewife	0	0	0	0	
	d. Labor	0	0	0	0	
	Total	0	2	38	40	p=0.025
4.	*Educational Level*					Significant
	a. Primary	0	0	0	0	
	b. Secondary	0	0	0	0	
	c. Higher Secondary	0	2	35	37	
	d. Degree	0	1	2	3	
	Total	0	3	37	40	p=0.05
5.	*Religion*					Significant
	a. Hindu	0	0	39	39	
	b. Muslim	0	0	1	1	
	c. Christian	0	0	0	0	
	d. Other	0	0	0	0	
	Total	0	0	40	40	p=0.1
6.	*Marital Status*					Not
	a. Married	0	0	0	0	Significant
	b. Unmarried	0	0	40	40	
	Total	0	0	0	40	p=0.4
7.	*Previous knownledge*					Significant
	a. Yes	0	1	29	30	
	b. No	0	1	9	10	
	Total	0	2	38	40	p=0.01
8.	*Sources of Health Information*					Significant
	a. Newspaper	0	1	4	5	
	b. Television	0	0	11	11	
	c. Books	0	1	23	24	
	d. Redio	0	0	0	0	
	Total	0	2	38	40	p=0.05

Summary

This chapter dealt with analysis and interpretation of data collected to evaluate the effectiveness of structured teaching module. Findings reveals that the pre-test knowledge mean was 6.24±3.58 (SD) which is 31.36% of the total score, whereas in post-test, the mean score 5.8±1.09 (SD) which is 87.30% of the total score.

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